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FEDERAL COMMUNICATIONS COMMISSION BIFFICE OF THE SECRETARY

### **BY HAND DELIVERY**

August 15, 2000

Ms. Magalie Roman Salas Office of the Secretary Federal Communications Commission 445 Twelfth Street, S.W. Washington, DC 20554

RE: Ex Parte Presentation, CC Docket No. 94-102

Dear Ms. Salas:

On August 9, 2000, Robert Rowe, consultant to VoiceStream Wireless Corporation, Dr. Peter Duffett-Smith, Chief Technical Officer, Cambridge Positioning Systems, and I met with Kris Monteith, Blaise Scinto, Bill Lane, Ron Netro, Tom Stanley, Won Kim, Patrick Forster, and Marty Liebman of the Wireless Telecommunications Bureau. The purpose of the meeting was to discuss the results of Stage One of VoiceStream's E-OTD technology trial currently underway in Houston, TX.

The results of Stage One of the trial indicate that E-OTD can approach the current E911 Phase II requirements. In sum, during this phase of the trial VoiceStream was able to locate 61% of calls within 50 meters and 99% of calls within 150 meters. This compares very favorably with the current FCC E911 Phase II requirements (50 meters for 67% of calls, 150 meters for 95% of calls). A copy of the presentation made to the Wireless Bureau on the trial results is attached to this letter.

In addition, VoiceStream discussed recent assertions by Qualcomm Incorporated that a GPS-based location technology was available to GSM carriers. Contrary to Qualcomm's assertions, VoiceStream has pursued this issue exhaustively with its vendors, and none of its manufacturers can deliver handsets incorporating GPS technology in the volumes and timeframes mandated by the Commission in this proceeding. VoiceStream referenced this fact in the E911 Phase II multi-party meeting held by the Wireless Bureau on June 29, 2000.

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Further, contrary to Qualcomm's assertions, grant of VoiceStream's waiver request would be in the public interest. As noted above, VoiceStream has provided quantifiable evidence that E-OTD technology holds the promise of meeting the FCC's E911 Phase II accuracy standards. Further, VoiceStream's commitment to implement a Network Software Solution that would provide better than Phase I (i.e., cell site) accuracy for legacy mobiles provides significant additional public safety benefits. However, VoiceStream does not believe that any technology other than E-OTD can be brought to market for its networks in the timeframes directed by the FCC. Expeditious grant of VoiceStream's waiver is required in order to provide the infrastructure manufacturers (and their customers) the necessary confidence to allow the expenditure of monies and resources to deliver this technology in the accelerated timeframes required by the FCC. Without the confidence that the FCC rules will be met on equipment delivery, the vendors are less likely to commit the necessary resources.

Pursuant to Section 1.1206 of the Commission's Rules, two copies of this letter have been filed with your office. Please do not hesitate to contact me with any questions.

Sincerely,

Robert A. Calaff
Corporate Counsel –

Governmental & Regulatory Affairs

### **Enclosure**

cc (w/out attachment):

Kris Montieth

Blaise Scinto

Bill Lane

Ron Netro

Tom Stanley

Won Kim

Patrick Forster

Marty Liebman



# Houston E-OTD Stage One trial results Presentation to the FCC

August 9th 2000

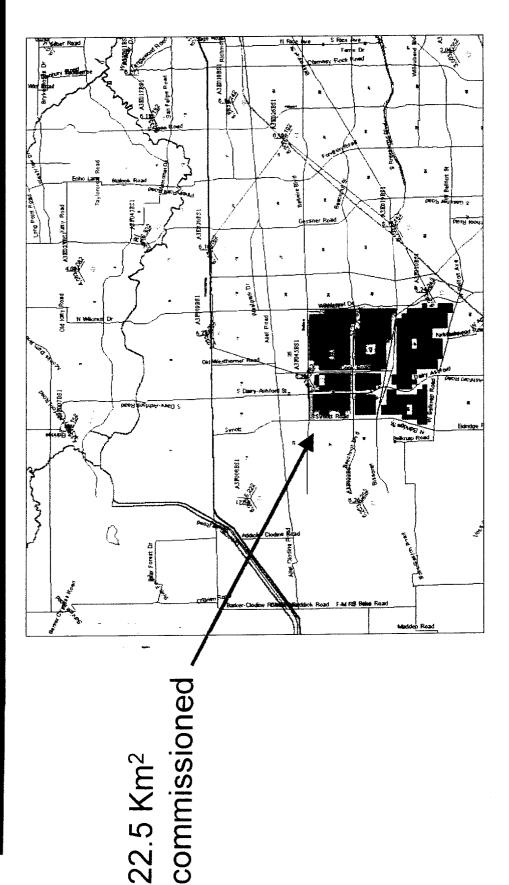
# **Trial description**

- 325 Km² trial area in Houston commercial/suburban setting
- Cambridge Positioning Systems E-OTD equipment
- 23 Km<sup>2</sup> currently commissioned and operational
- Stage One: stationary measurements in vehicle and out of vehicle
- Stage Two: moving measurements in vehicles, and measurements inside buildings





# Houston test map



 $22.5 \, \text{Km}^2$ 





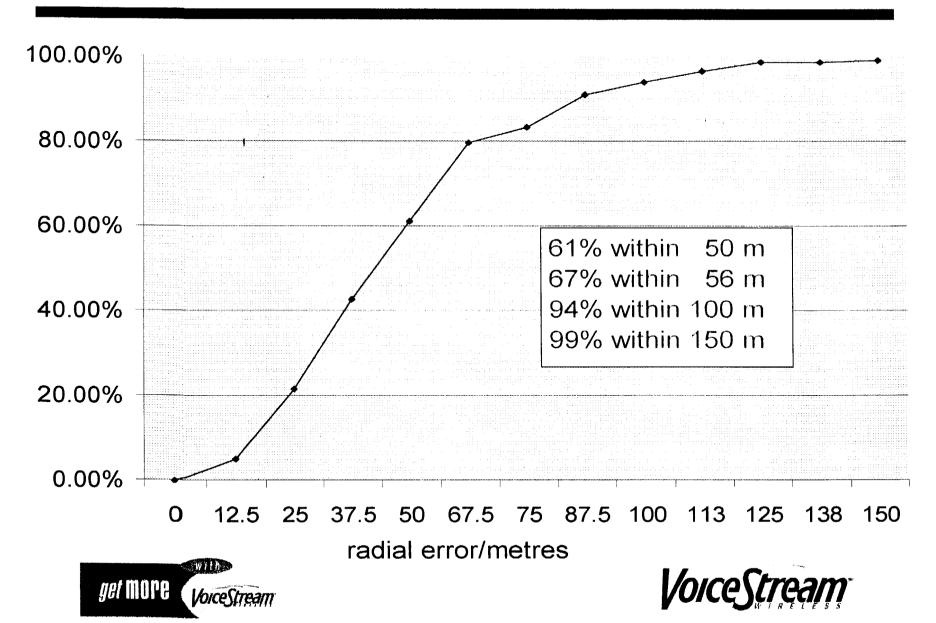
### **Data collection**

- Results represent all data collected between 28th July and 1st August in measurement area
- Data is collected by pressing a button on the handset and recording the returned position
- The position is provided in real time
- The data represents more than 500 position measurements throughout the 23 Km<sup>2</sup> test area
- The data presented does not accumulate measurements throughout a call to improve accuracy

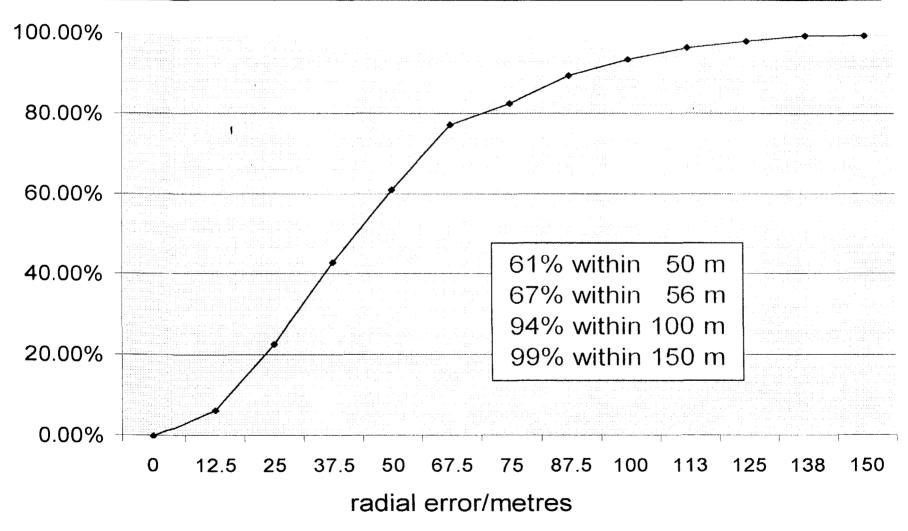




### **Pedestrian measurements**



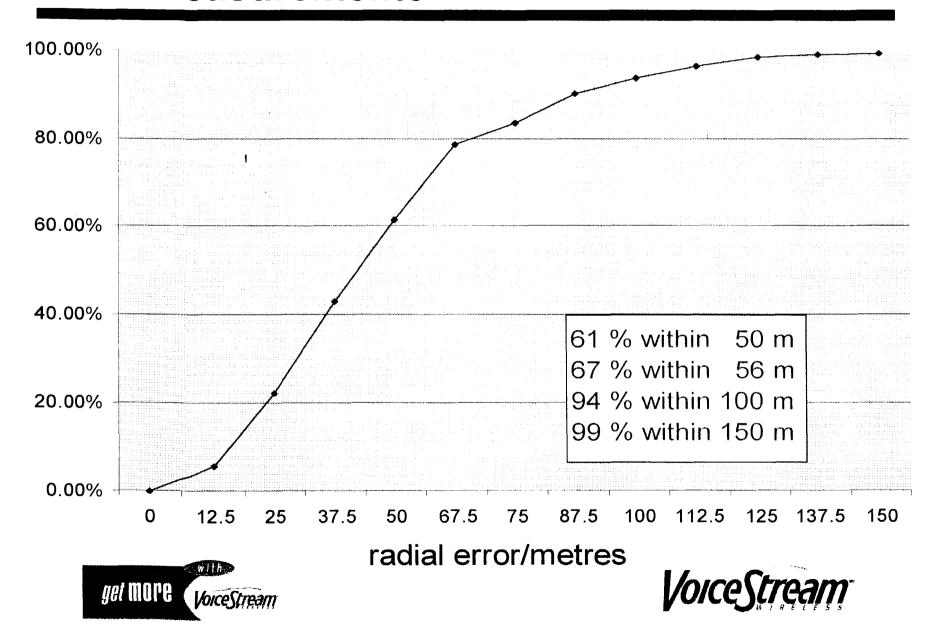
### In vehicle measurements







### All measurements



# Results summary

- Virtually no difference between pedestrian and in vehicle measurements
- 61 per cent within 50 metres
- 67 per cent within 56 metres
- 94 per cent within 100 metres
- 99 per cent within 150 metres





### **Conclusions**

 E-OTD appears, at this early stage, to perform well in areas representing more than 70 per cent of E911 calls

 The results indicate that E-OTD can approach the requirements of the FCC in these areas



